# SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service Washington, DC



U.S. Department of Transportation

Federal Aviation Administration

NE-05-58 June 6, 2005

http://www.faa.gov/aircraft/safety/alerts/

This is information only. Recommendations aren't mandatory.

## Introduction

This Special Airworthiness Information Bulletin alerts you, owners and operators of Lycoming Engines (Textron) and Teledyne Continental Motors reciprocating engines, of the need to check the maintenance records of your engine, any engine parts, or aircraft imported into the United States. This check is to determine if the last engine overhaul or the last repair of any engine part was accomplished after October 1, 1997 by Provence Aéro Maintenance (Provence). Provence is located in France at 13728 Marignane, or Route des Cravons, 13130 Berre l'Etang.

# **Background**

The French airworthiness authority (DGAC), has advised us that on December 16, 1998, they cancelled Provence Aéro Maintenance JAR 145 approval No. F-048, because of faulty engine maintenance. This followed an in-service engine failure due to the poor assembly of a crankshaft counterweight bearing, which resulted in a hole in the engine's crankcase. Additional investigation found more problems: crankcase bolts and rod bolts were nonconforming, nuts were missing, clips were improperly installed, etc. The engine had accumulated 192 flight hours since last overhaul. Provence overhauled this engine on November 18, 1998.

Following supplementary investigations, the DGAC determined there was no guarantee of

conformity on the engines overhauled or parts released by Provence after October 1, 1997. The quality of the work performed was poor, the quality of the facilities records was poor, or the records were not made available to the DGAC. Therefore, a list of engine models or engine serial numbers affected is unavailable. Due to the nature of the nonconformities, the DGAC is requiring a full, off-wing inspection at the piece part level.

Some additional engines could contain similar nonconformities that affect safety. To address this, the DGAC issued AD No. F-2005-023, effective February 12, 2005 (canceling AD 2001-139). That AD mandates, "All engines overhauled and parts released by Provence Aéro Maintenance after October 1, 1997 must be completely inspected and, if necessary, their conformity must be restored by an approved workshop."

## Recommendation

If French AD No. F-2005-023 affects your engine or any part of the engine, we highly recommend you inspect the engine completely and comply with the French AD.

# For Further Information, Contact

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X	AIRWORTHINESS DIRECT No F-2005-023	IVE	Distribution:	Issue date: February 02, 2005	Page : 1/2
Direction générale de l'aviation	This Airworthiness Directive is published by the DGAC a Airworthiness Authority of the State of Registry for the a			Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.	
civile France GSAC publication	No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive, unless otherwise agreed with the Authority of the State of Registry.				
Corresponding foreign Airworthiness Directive(s):		Airworthiness Directive(s) replaced:			
Not applicable		2001-139 which is cancelled by its Revision 1			
Person in charge of airworthiness: TEXTRON LYCOMING AND TELEDYNE CONTINENTAL MOTORS		Type(s): All Lycoming and TCM types			
Type certificate(s) No. All Lycoming and TCM piston engines type certificates					
TCDS No All Lycoming and TCM piston engines TCDS					
ATA chapter:	Subject:				
72	Engine - Faulty maintenance				

#### 1. **EFFECTIVITY**:

This Airworthiness Directive (AD) applies to engines below mentioned which equip French registered aircraft. Owners and operators of aircraft which are not on the French register should refer to their National Authority.

This AD applies to TEXTRON LYCOMING and TELEDYNE CONTINENTAL MOTORS piston engines for which last overhaul was carried on after the October 1<sup>st</sup>, 1997 by Provence Aéro Maintenance,

and,

All engine parts for TEXTRON LYCOMING and TELEDYNE CONTINENTAL MOTORS piston engines released after this date by this company,

at the following addresses:

- 13728 Marignane, France.
- Route des Cravons, 13130 Berre l'Etang, France.

#### 2. REASONS:

EASA considered that the issue of Airworthiness Directives aiming at correcting an hazardous situation due to a faulty servicing operation is not part of its responsibility.

AD 2001-139 which falls into this category may not be taken into account by EASA.

Therefore this AD is issued by DGAC on behalf of the registration state. It cancels and replaces AD 2001-139 issued before September 28, 2003, while preserving the text of the latter.



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Following an in-service event, consequence of an engine breakdown with a crankcase hole, investigations showed that the origin was a crankshaft counterweight bearing misassembly. Numerous other non conformities were apparent: crankcase bolts and rod bolts were non conform, nuts were missing, clips were improperly installed, etc. The engine had accumulated 192 flight hours since last overhaul.

This engine was overhauled by Provence Aéro Maintenance on November 18, 1998.

French DGAC cancelled Provence Aéro Maintenance JAR 145 approval No. F-048 on December 16, 1998.

Following complementary investigations, DGAC determined there was no guarantee of absence of ron conformity on the engines overhauled or parts released by Provence Aéro Maintenance after October 1<sup>st</sup>, 1997. Some other engines could contain such non conformities affecting safety.

#### 3. MANDATORY ACTIONS AND COMPLIANCE TIMES:

Unless already done as per AD 2001-139, the following actions are mandatory:

- 3.1. All engines overhauled and parts released by Provence Aéro Maintenance after October f<sup>t</sup>, 1997 must be completely inspected and, if necessary, their conformity must be restored by an approved workshop.
- 3.2. In order to determine for each case the limit date for the conformity inspection and serviceability restoration, as mentioned in paragraph 3.1. above, concerned aircraft owners and users are required to inform DGAC SFACT/N.ME (Fax: 00 33 1 58 09 43 19), within one month after the effective date of this AD and provide the following information:
  - JAA Form 1 copy,
  - Flight hours since last overhaul,
  - Indication of maintenance,
  - Particular maintenance operations since last overhaul, different of usual maintenance operation indication of improperly performed work.

### 4. REFERENCE PUBLICATION:

None.

### 5. EFFECTIVE DATE:

February 12, 2005.

## 6. APPROVAL:

This AD is approved by DGAC.